IN THE APPLICATION

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FOR A

**METHOD, COMPUTER USEABLE MEDIUM, AND SYSTEM FOR
ENTERPRISE RESOURCE MANAGEMENT**

METHOD, COMPUTER USEABLE MEDIUM, AND SYSTEM FOR ENTERPRISE RESOURCE MANAGEMENT

BACKGROUND OF THE INVENTION

1. FIELD OF THE INVENTION

The present invention relates generally to management systems and, more particularly to a method, computer useable medium, and/or system for enterprise resource management.

2. DESCRIPTION OF THE RELATED ART

Many companies and/or businesses invest a sizable amount of revenue in providing entertainment to clients, vendors, employees, etc. Currently, such companies and/or businesses utilize rudimentary processes to manage, distribute, track, organize, analyze, and store their entertainment assets (e.g., tickets, coupons, raffles, etc.). There is a need for a method, computer useable medium, and/or system that is configured to enable a company and/or business to easily control and manage every aspect of their internal resources. The related art is represented by the following references of interest.

U.S. Patent Application Publication No. 2002/0042729 A1, published on April 11, 2002 for Shunsuke Yajima et al., describes a specific electronic information related information providing system and method for providing information related to specific electronic information to a holder of the specific electronic

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information. The Yajima et al. application does not suggest a method, computer useable medium, and/or system for enterprise resource management according to the claimed invention.

U.S. Patent Application Publication No. 2002/0077983 A1, published on June 20, 2002 for Nobuhiro Tagashira, describes a ticket management system for issuing electronic tickets and distributing paper tickets of paper media on which electronic tickets were output, to a ticket issuance apparatus and a ticket input apparatus constituting the ticket management system, to its control method, and to a computer readable storage medium storing programs for realizing the functions of the method. The Tagashira application does not suggest a method, computer useable medium, and/or system for enterprise resource management according to the claimed invention.

U.S. Patent Application Publication No. 2002/0082879 A1, published on June 27, 2002 for Brent Miller et al., describes a method and system for seat selection and ticket purchasing in a networked computer system. The Miller et al. application does not suggest a method, computer useable medium, and/or system for enterprise resource management according to the claimed invention.

U.S. Patent Application Publication No. 2002/0116234 A1, published on August 22, 2002 for Mikio Nagasawa, describes a method for providing information service and for managing information processing resources. The Nagasawa application does not suggest a method, computer useable medium, and/or system for

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enterprise resource management according to the claimed invention.

U.S. Patent Application Publication No. 2002/0116343 A1 and Japan Patent Application Publication No. 2002197221 A, published on August 22, 2002 and July 12, 2002, respectively, for Masakazu Nakamura et al., describe an apparatus, system, and method for electronic ticket management and electronic ticket distribution authentication. The Nakamura et al. applications do not suggest a method, computer useable medium, and/or system for enterprise resource management according to the claimed invention.

U.S. Patent Application Publication No. 2002/0174003 A1, published on November 21, 2002 for William G. Redmann et al., describes a method and apparatus for providing visitors with a personalized itinerary and managed access to attractions. The Redmann et al. application does not suggest a method, computer useable medium, and/or system for enterprise resource management according to the claimed invention.

U.S. Patent No. 4,931,932, issued on June 5, 1990 to Stanley Dalnekoff et al., describes a computerized system with means to automatically clear and sell wait-listed customer reservations. The Dalnekoff et al. patent does not suggest a method, computer useable medium, and/or system for enterprise resource management according to the claimed invention.

U.S. Patent No. 5,404,291, issued on April 4, 1995 to Gordon S. Kerr et al., describes an inventory control system for allocating items of inventory in an optimal manner. The Kerr et al. patent does not suggest a method, computer useable medium,

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and/or system for enterprise resource management according to the claimed invention.

U.S. Patent No. 5,581,461, issued on December 3, 1996 to Denise Coll et al., describes a computerized system and method for storage, processing, and transfer of inventory and other data among a central processor/database and a number of remote locations. The Coll et al. patent does not suggest a method, computer useable medium, and/or system for enterprise resource management according to the claimed invention.

U.S. Patent No. 6,014,628, issued on January 11, 2000 to Vincent J. Kovarik, Jr., describes a method and system for generically tracking an entity in a specific domain. The Kovarik, Jr. patent does not suggest a method, computer useable medium, and/or system for enterprise resource management according to the claimed invention.

U.S. Patent No. 6,067,532, issued on May 23, 2000 to Lucas Gebb, describes a method and system for redistributing, purchasing, or selling tickets on the secondary market. The Gebb patent and application does not suggest a method, computer useable medium, and/or system for enterprise resource management according to the claimed invention.

U.S. Patent No. 6,356,874 B1, issued on March 12, 1992 to Harald Øhrn, describes a computer-based method and system for ordering services. The Øhrn patent does not suggest a method, computer useable medium, and/or system for enterprise resource management according to the claimed invention.

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U.S. Patent No. 6,477,533 B2, issued on November 22, 2002 to Martin E. Schiff et al., describes a method and system for managing agent ownership of customers utilizing a cruise web server environment to electronically communicate via a data communications network with a plurality of remote users using web browser programs. The Schiff et al. patent does not suggest a method, computer useable medium, and/or system for enterprise resource management according to the claimed invention.

Europe Published Patent Application No. EP 1,098,273 A2, published on May 9, 2001, describes an electronic ticket selling system. The Europe '273 application does not suggest a method, computer useable medium, and/or system for enterprise resource management according to the claimed invention.

World Intellectual Property Organization (WIPO) Patent Application Publication No. WO 01/71669 A2, published on September 27, 2001, describes an electronic ticket exchange system that enables venue owners to sell tickets to patrons at a fair market value for each event, and patrons to more easily trade and transfer tickets among one another after they have been purchased from the venue owner. The WIPO '669 application does not suggest a method, computer useable medium, and/or system for enterprise resource management according to the claimed invention.

WIPO Patent Application Publication No. WO 01/95158 A1, published on December 13, 2001, describes a method and apparatus for managing and accessing information related to a computerized system. The WIPO '158 application does not suggest a method,

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computer useable medium, and/or system for enterprise resource management according to the claimed invention.

Japan Patent Application Publication No. 2002140401 A, published on May 17, 2002, describes a seat reservation and selling system and a ticket selling management system of a reserving company capable of smoothly managing two kinds of change and refund procedures before and after the issue of tickets, and allowing a ticket issuing store to acquire conventional sales and dealing percentage income. The Japan '401 application does not suggest a method, computer useable medium, and/or system for enterprise resource management according to the claimed invention.

Japan Patent Application Publication No. 2002183766 A, published on June 28, 2002, describes a management method and device for ticket issue. The Japan '766 application does not suggest a method, computer useable medium, and/or system for enterprise resource management according to the claimed invention.

Japan Patent Application Publication No. 2002203161 A, published on July 19, 2002, describes an electronic ticket issue management system and usage management system for carrying out a sales procedure from booking to issue of a ticklet via the internet for issuing an electronic ticket to a customer. The Japan '161 application does not suggest a method, computer useable medium, and/or system for enterprise resource management according to the claimed invention.

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Japan Patent Application Publication No. 2002269279 A, published on September 20, 2002, describes a transfer management method for an on-line ticket and management server system that reduces management cost by facilitating ticket management including ticket transfer confirmation without directly selling the ticket. The Japan '279 application does not suggest a method, computer useable medium, and/or system for enterprise resource management according to the claimed invention.

WIPO Patent Application Publication No. WO 02/075626 A1, published on September 26, 2002, describes an on-line ticket transaction system and method. The WIPO '626 application does not suggest a method, computer useable medium, and/or system for enterprise resource management according to the claimed invention.

WIPO Patent Application Publication No. WO 02/080068 A1, published on October 10, 2002, describes a ticket issuing, home delivering system. The WIPO '068 application does not suggest a method, computer useable medium, and/or system for enterprise resource management according to the claimed invention.

WIPO Patent Application Publication No. WO 02/086789 A1, published on October 31, 2002, describes a method for conducting an on-line raffle session. The WIPO '789 application does not suggest a method, computer useable medium, and/or system for enterprise resource management according to the claimed invention.

Europe Patent Application Publication No. EP 1 267 289 A1, published on December 18, 2002, describes an electronic ticket

system in which right information on a ticket is purchased via communication means, and a writable storage medium of the right information is used, thereby granting admittance into an event facility. The Europe '289 application does not suggest a method, computer useable medium, and/or system for enterprise resource management according to the claimed invention.

None of the above inventions and patents, taken either singly or in combination, is seen to describe the instant invention as claimed. Thus, a method, computer useable medium, and/or system for enterprise resource management solving the aforementioned problems is desired.

SUMMARY OF THE INVENTION

The present invention is a method, computer useable medium, and/or system for enterprise resource management (ERM) that executes ERM software for managing internal resources of a company/business in an ERM system, selectively authorizes users associated with the company/business based on grouping designations of the users to access internal resource data about the company/business via the ERM software and an ERM database, and manages, distributes, tracks, organizes, analyzes, and stores internal resource data via the ERM software.

Accordingly, it is a principal aspect of the invention to provide a method, computer useable medium, and/or system for ERM that executes ERM software for managing internal resources of a company/business in an ERM system, selectively authorizes users associated with the company/business based on grouping

designations of the users to access internal resource data about the company/business via the ERM software and an ERM database, and manages, distributes, tracks, organizes, analyzes, and stores internal resource data via the ERM software.

It is another aspect of the invention to provide a method, computer useable medium, and/or system for ERM that executes a users administrative interface portion of the ERM software; executes an inventory portion of the ERM software, executes a distribution portion of the ERM software, executes a maintenance information portion of the ERM software, executes a maintenance and support portion of the ERM software, executes a communication portion of the ERM software, executes a help and tutorial portion of the ERM software, executes a user information and system settings portion of the ERM software, selectively authorizes users associated with the company/business based on grouping designations of the users to access internal resource data about the company/business via the ERM software and an ERM database, and manages, distributes, tracks, organizes, analyzes, and stores internal resource data via the ERM software.

It is a further aspect of the invention to provide a method, computer useable medium, and/or system for ERM that executes ERM software for managing internal resources of a company/business in an ERM system, selectively authorizes users associated with the company/business based on grouping designations of the users to access internal resource data about the company/business via the ERM software and an ERM database, and manages, distributes, tracks, organizes, analyzes, and stores internal resource data

via the ERM software, and analyzes entertainment resources stored in the ERM database by utilizing information from a national event index service.

It is an aspect of the invention to provide improved elements and arrangements thereof in a method, computer useable medium, and/or a system for enterprise resource management for the purposes described which is dependable and fully effective in accomplishing its intended purposes.

These and other aspects of the present invention will become readily apparent upon further review of the following specification and drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a functional diagram of a system for enterprise resource management according to the present invention.

Fig. 2 is a functional diagram of portions of ERM software that are accessible to an interconnected computer according to the present invention.

Fig. 3 is a functional diagram of a login portion of ERM software according to the present invention.

Figs. 4A and **4B** are a functional diagram of a user administrative portion of ERM software according to the present invention.

Fig. 5 is a functional diagram of an inventory portion of ERM software according to the present invention.

Fig. 6 is a functional diagram of a distribution portion of ERM software according to the present invention.

Fig. 7 is a functional diagram of a management information systems portion of ERM software according to the present invention.

Fig. 8 is a functional diagram of a maintenance and support portion of ERM software according to the present invention.

Fig. 9 is a functional diagram of a communication portion of ERM software according to the present invention.

Fig. 10 is a functional diagram of a help and tutorial portion of ERM software according to the present invention.

Fig. 11 is a functional diagram of a software user interface portion of ERM software according to the present invention.

Fig. 12 is a functional diagram of site administrator processes that may occur during interaction with ERM software according to the present invention.

Fig. 13 is a functional diagram of site assistant administrator processes that may occur during interaction with ERM software according to the present invention.

Fig. 14 is a functional diagram of item manager processes that may occur during interaction with ERM software according to the present invention.

Fig. 15 is a functional diagram of general user processes that may occur during interaction with ERM software according to the present invention.

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Fig. 16 is a functional diagram of inventory manager processes that may occur during interaction with ERM software according to the present invention.

Fig. 17 is a functional diagram of reporting manager processes that may occur during interaction with ERM software according to the present invention.

Fig. 18 is a functional diagram of distribution manager processes that may occur during interaction with ERM software according to the present invention.

Fig. 19 is a functional diagram of human resource manager processes that may occur during interaction with ERM software according to the present invention.

Fig. 20 is a diagram of the tables included in an ERM database according to the present invention.

Figs. 21A, 21B, 21C, and 21D are table structures of an ERM database according to the present invention.

Figs. 22A, 22B, 22C, and 22D are table structures of an ERM database according to the present invention.

Fig. 23 is a functional diagram of ERM database table relationships between primary keys and foreign keys that may occur during interaction with ERM software according to the present invention.

Fig. 24 is table structures of a National Event Index Service (NEIS) database according to the present invention.

Fig. 25 is a functional diagram of database table relationships within the NEIS structure that may occur during interaction with ERM software according to the present invention.

Fig. 26 is a basic XML structure for a Hyper Text Transport Protocol (HTTP) request and response from the NEIS system according to the present invention.

Figs. 27A, **27B**, and **27C** are a basic XML structure for a HTTP request and response from the NEIS system that may be used with ERM software according to the present invention.

Similar reference characters denote corresponding features consistently throughout the attached drawings.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

The present invention is a method, computer useable medium, and/or system for enterprise resource management. The invention disclosed herein is, of course, susceptible of embodiment in many different forms. Shown in the drawings and described herein below in detail are preferred embodiments of the invention. It is to be understood, however, that the present disclosure is an exemplification of the principles of the invention and does not limit the invention to the illustrated embodiments.

Referring to the drawings, **Fig. 1** shows an ERM system where a variety of users may interconnect with an ERM website over the Internet **16**. The ERM website is administered by an ERM database **12** and an ERM server **14**. The ERM system is configured to enable a company and/or business to manage, distribute, track,

organize, analyze, and store their internal resources, such as entertainment assets or the like, with ease and simplicity.

The ERM server **14** includes stored therein ERM software **10**. The ERM software **10** may be stored in the memory of the server **14** that may be any combination of random access memory or cache memory. The ERM software **10** includes a plurality of computer instructions and may additionally be carried on any computer useable medium according to the desires of the user, such as a computer hard drive, a floppy disk, Flash memory, optical memory, magnetic media memory, or the like. The ERM server **14** includes a processor, an operating system, application programs, and data. In accordance with well known principles, the processor executes the applications in the memory of the ERM server **14** under control of the operating system.

A variety of users may use the ERM system. The variety of users who may use the ERM system may be categorized into groups of users including a SITE ADMINISTRATOR **18**, a SITE ASSISTANT ADMINISTRATOR **20**, an ITEM MANAGER **22**, a GENERAL USER **24**, an INVENTORY/SCHEDULE MANAGER **26**, a REPORT MANAGER **28**, a DISTRIBUTION MANAGER **30**, a SYSTEM ADMINISTRATOR **32**, and a HUMAN RESOURCE MANAGER **34**.

Any of the users **18**, **20**, **22**, **24**, **26**, **28**, **30**, **32**, and **34** may utilize a computer device to wirelessly and/or non-wirelessly interconnect with the ERM website **10**. Such a computer device may be a wireless or non-wireless palm-top, lap-top, personal computer, workstation, or any other similar configured computer

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device. The computer device may execute standard operating system software, such as Windows 98, 2000, XP, UNIX, or the like.

Fig. 2 shows portions 1000 of the ERM software 10 that are accessible to a user using an interconnected computer 110. Users administrative interface 200, inventory 300, distribution 400, maintenance information 500, maintenance and support 600, communication 700, and help and tutorial 800 portions of the ERM software 10 are available to a user using an interconnected computer 110 via a MAIN LANDING page 112. The user may also modify and/or change user information and system settings using the user information and system settings 114 portion of the ERM software 10.

Fig. 3 shows the login portion of the ERM software 110. The LOGIN page 120 is the gateway to the administrative tools for the ERM software 10 and the ERM database 150. The LOGIN page 120 requires a user to enter a username and password. Any administrative user may login through this path and access their job functions as specified by their user group. A user who desires to access the SOFTWARE USER INTERFACE page 900 may be required to enter a user and password using a SECURE LOGIN page 142. Successful access past the LOGIN page 120 enables a user to access the MAIN LANDING page 112 where every administrative function in the ERM software may be accessed.

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Figs. **4A** and **4B** show user administrative processes available to a user after accessing the USERS ADMINISTRATIVE INTERFACE LANDING page **200**. The USERS ADMINISTRATIVE INTERFACE LANDING page **200** enables a user to view all of the users inside the ERM database **150** via the VIEW ALL USERS page **202**. The ERM software **10** provides a list of the users that may be sorted by various fields. From the list a particular user may choose to view the information associated with his/her or any other user's entire profile that is contained within the ERM database **150**.

The ADD SPECIFIC USER page **204** enables a user to manually add a new user into the ERM database **150** by entering a multitude of information that may include name, address, contact information, username, password, working group, or the like. When all desired information has been entered the new user is then added to the ERM database **150**. The VIEW SPECIFIC USER INFORMATION page **206** displays an entire user profile including the full name, email address, contact information, username, or the like.

The MODIFY SPECIFIC USER INFORMATION page **208** enables a user to update user information for a selected user and make any desired changes to the profile information for the selected user, including altering their working group within the ERM software **10** (e.g., administrator, inventory manager, general user, or the like). A selected user may also be flagged from this page. Flagging a user entails marking their profile with a warning and/or blacklisting that user from obtaining company/business

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resources from specific events (e.g., Eagles tickets if they behave badly at a game, or the like). A selected user's account may also be suspended so the selected user may not be able to login to the ERM system. This saves an administrator from removing their account completely. A selected user may also be banned from the ERM system so that they are unable to apply for membership or utilize the ERM software as long as the ban is in effect. The DELETE SPECIFIC USER page **210** enables a user to remove a selected user from the ERM database **150** permanently.

The ADMINISTRATION ALL USERS VERIFICATION LIST page **212** enables a user (e.g., an administrator or the like) to view applications from users desiring to become a member of the ERM system, and to approve and/or decline their membership. When a user applies to use the ERM system and become a general user of the ERM system an administrator needs to approve them before they are actually allowed to access the user side of the ERM software **10**. This forces each user to be screened by an authority inside the company/business. The ERM database **150** may also utilize a specialized function within the ERM software **10** that allows the ERM system to connect directly to the Active Directory (AD) structure of the company/business pulling from it Names, username, group, and other personal information using Lightweight Directory Access Protocol (LDAP). The enterprise resource manager may also capture the organization of the company/business from the AD structure as well as create an organizational chart

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within the ERM software **10** based on the user/member structure within the AD.

The VERIFY SPECIFIC NEW USER INFORMATION page **214** enables a user to view the entire profile of an applicant seeking membership into the ERM system. The VIEW ALL CLIENTS page **216** enables a user to view all of the clients that have been entered into the ERM system. The ERM system can distinguish between various types of membership. A direct membership of a user is different from the membership of a client or charity.

The ADD SPECIFIC CLIENT page **218** enables a user to add clients to the ERM system by entering information about them such as company/business name, contact name, contact information, phone numbers, or the like. The VIEW SPECIFIC CLIENT INFORMATION page **220** enables a user to view detailed profile information of a client stored in the ERM database **150**. A user may alter and/or update a selected client profile using the MODIFY SPECIFIC CLIENT page **222**, or delete a selected client from the ERM system using the DELETE SPECIFIC CLIENT page **224**.

The VIEW ALL DISTRIBUTION GROUPS page **226** enables a user to view the existing organizational structure of the user, otherwise known as a distribution group. The term distribution group is used because the organization of this structure helps better target the distribution of system resources. A user may also assign managers to each distribution group that are users of the system to help delegate responsibilities of resources. The ERM

system maintains a detailed record of the overview and organization of the associated company/business. The administrators of the company/business determine an organization chart and may use it to group users into company/business specific categories for distribution, shipping, payment of resources, or the like.

The ADD SPECIFIC DISTRIBUTION GROUP page **228** enables a user to add parent or child grouping to the organizational charts of the distribution groups. The VIEW SPECIFIC DISTRIBUTION page **230** enables a user to view the properties of an organizational distribution group and to see who is already under that particular group. The MODIFY SPECIFIC DISTRIBUTION GROUP page **232** enables a user to modify existing groups and change the grouping structure of where they lay within an organizational tree. Users may also be added to the organizational branch using this page **232**. The DELETE SPECIFIC DISTRIBUTION GROUP page **234** enables a user to remove an entire branch of an organizational tree and remove users from a specific distribution group as well.

The VIEW ALL CHARITY INFORMATION page **236** enables a user to view charities associated with the company/business in a list. The ERM software **10** keeps track of charities which may be partnered with the company/business associated with the ERM software **10**. Company/business resources such as money, tickets, or the like, may be offered as charitable donations to these charities. The ADD CHARITY page **238** enables a user to add an affiliated charity to

the ERM database **150** by entering in specific information about the particular charity, such as their name, contact information, federal charity ID, or the like. The MODIFY CHARITY INFORMATION page **242** enables a user to alter any information about a particular charity. The DELETE CHARITY page **244** enables a user to remove any charity from the ERM database **150**.

Fig. 5 shows inventory processes available to a user after accessing the INVENTORY LANDING page **300**. The INVENTORY LANDING page **300** provides a link to all of the functions needed to add, update, and delete inventory in the ERM database 150. There are two possible inventory management interfaces that an administrator may access. The first is a standard management interface and the second is a management interface that deals in large quantities of resources and has a number of functions that aid in the management of mass-quantities. The second management interface is referred to as the inventory manager plus. The VIEW EXISTING INVENTORY page **302** enables a user to search and view existing inventory in the ERM system. Depending on the administrator's group role, only certain inventory may be available to them. This function provides a list to the administrator of current inventory to work with in the ERM database **150**.

The ADD NEW INVENTORY ITEM page **304** enables a user to add inventory to the ERM database **150**, and group and/or earmark the inventory according to the desires of the user. The resource

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groups may be specified and added as needed with these functions. Each resource utilizes a specific event or resource identification (ID) from the ERM system to relate the resource to an event or need for distribution. This event/resource ID is determined by either the National Event Index Service (NEIS) or a localized database structure containing company/business specific events.

The NEIS is a remote web service that feeds current event information to the ERM system to relate the resource to a corresponding category. The NEIS provides customers with a fully integrated and up-to-date information distribution system. This system offers a multitude of information about sporting, entertainment, and other events. The NEIS offers a host of data that extends well beyond the scope of just event name and time. The system may utilize the Microsoft .NET Framework or the like to build other applications that need data dissemination of this type.

The ERM software **10** allows qualified subscribers to link to the data center of the developer of the ERM software **10** and retrieve such information as event name, venue information, local attractions, restaurants, directions, event categories, or the like. The user may connect and build this technology directly into their software using any number of technologies including but not limited to PHP, ASP, ASP.NET, VB, C, HTML, XML, or the like. Each paying customer may be granted access depending on how much information they would like to retrieve from the system. There may be multiple types of subscriptions that may access

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different parts of the system such as restaurants, local attractions, and directions.

The SELECT INVENTORY CATEGORY page 306 enables a user to attach a newly added resource to an event category or resource category. The ERM system uses the NEIS or local event structures to determine the linking event ID. The VIEW SPECIFIC INVENTORY ITEM page 308 enables a user to view specific information within a resource group in the inventory in the ERM database 150. The ERM software 10 may display the current status, price, owner, distribution group, or the like. The MODIFY EXISTING INVENTORY page 310 enables a user to update a resource or group of resources if the particular resource is not bid on, distributed, or paid for by an end user. Changing the price, locale, or pertinent data about a particular resource after an agreement with an end user is invalid within the ERM system. The DELETE EXISTING INVENTORY page 312 enables a user to delete a resource group. The rules prohibiting a user from deleting a resource group are similar to the rules for updating a resource group. If the resource is in use or has not been archived after it has been distributed, the ERM system does not allow a resource group to be removed.

Fig. 6 shows distribution processes available to a user after accessing the DISTRIBUTION LANDING page 400. The DISTRIBUTION LANDING page 400 links a user to all of the functions within the distribution section of the ERM software 10. The distribution

section is uniquely designed to handle multiple requests on a resource group for distribution. As such, the ERM software **10** handles all of the distributions similarly by addressing only the next step in the phase of linking a resource to a user. The TABLE OF ITEMS page **402** displays resource groups inside one of six lifecycle categories. These categories include, but are not limited to, open, pending distribution, distributed, on hold, allocated, and unallocated. Each resource should fit into one of these six categories. This page **402** displays a table of resources that is broken into these categories on selection.

The CALENDAR OF ITEMS page **404** offers a calendar that a user may interact with to select resource groups whose events take place on a particular date of selection. The user may select certain months, weeks, or dates that display resource groups that are applicable to those dates. The USER SEARCH FORM page **406** enables a user to search through resource groups that are interacting with specific users within the ERM system. Search criteria may be based around one user who is requesting, receiving, or has been granted a resource.

The CATEGORY SEARCH page **408** interacts with the NEIS system and a Local Event Index System (LEIS) to find resources that are within a category of choice by the user. For example, if the user wishes to find all resources or tickets to an NFL game they may use this search function. The TYPE SEARCH page **410** enables a

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user to type in freeform text and search the ERM database **150** for associated resource groups.

The RULES page **412** represents a uniquely functioning piece of software that adapts to a resource that is selected to be handled on the RULES page **412**. The functions only bring up selections and criteria about the resource that is applicable to the resource at that time. For example, if a resource is being raffled, raffle functions are offered to a user instead of functions used by an administrator fulfilling requests for a resource. The ERM software **10** associated with the RULES page **412** determines the next step to every resource distribution and guides a user through each process. The distribution of any resource may be altered at any time manually and the process may be overridden according to the desires of the user.

The TAKE ACTION OFF RULES PAGE RESULTS DISPLAYED page **414** is hidden to the user but is a crucial piece of intelligent data manipulation within the ERM software **10**. The script associated with the page **414** handles all of the user requests by an administrator during the distribution and delivers the correct data to the rules page for the next step in handling a particular resource.

Fig. 7 shows management information systems processes available to a user after accessing the MANAGEMENT INFORMATION SYSTEMS LANDING page **500**. The MANAGEMENT INFORMATION SYSTEMS LANDING page **500** gives a user complete control over statistics and data tracking

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within the ERM software **10**. From this page **500** a user may perform all of the reporting duties that the ERM system offers.

The VIEW REPORTS page **502** displays statistics that have been calculated in the ERM system concerning the resources and users that have been chosen by an administrator. The SEARCH REPORTS page **504** enables a user to search the ERM database **150** for specific data that may be mission critical in running the user's day-to-day operations. The PRINT REPORTS page **506** enables a user to stylize and print out reports in a hard copy. The ERM software **10** may be configured to email reports and utilize an online fax system.

The CREATE CUSTOMIZE REPORTS page **508** enables a user to create and customize the data output from the reporting system inside the ERM software **10**. The EXPORT REPORTS page **510** enables a user to save a report in a number of formats which include but is not limited to Microsoft Word (.doc), Excel (.xls), PowerPoint (.ppt), or even a proprietary ERM specific format that holds data concerning charts, graphs, and preferred statistics. The ARCHIVE REPORTS page **512** enables a user to archive the ERM database **150** and tracking system into customized file formats (.erm). The archiving functions effectively backup all statistical data inside the current data tables.

The ANALYSIS SUGGESTIONS page **514** analyzes the current status of a particular inventory and distributions and makes detailed, intelligent suggestions to the associated user including hints on

procurement and efficient distribution policies. The ITEM DISPOSITION STATUS page **516** enables a user to view the previous and current lifecycle status of a resource group. The ACTION ITEM LIST page **518** is associated with a special piece of software contained within the ERM software **10** that provides a snapshot of critical action items that are pending in the ERM system. The ERM software **10** displays the most important items of consideration in red at the top of a table, the non-critical pending items in the middle of the table in yellow, and the least important items for consideration in green at the bottom of the table. The user may click on any of the items and the system will direct them to the appropriate actions to take on the resource. For example, if a resource were distributed and needed to be shipped within less than a twenty-four hour time span the resource and explanation of what action should be taken will be displayed at the top of the action item table in red. If the resource is allocated and needs to be distributed to a user in the next month, the system would display the resource at the bottom of the table in green.

The CREATE SURVEY LIBRARY page **520** enables a user to create and form their own personalized surveys and feedback forms by adding, modifying and/or deleting questions and forms from the ERM database **150**. These surveys may be attached to any distribution to increase pipeline efficiency and retrieve required information for tax forms as well as assess the impact of the resources on clients and sales initiatives. The CREATE SURVEY page **522** enables a user to pick from the library questions and forms that have

either been pre-populated in the ERM software **10** or downloaded

from the ERM software **10** distributor's web site in order to place

them together in one survey. The user may name the survey and

file it for use with distributions. The DISTRIBUTE SURVEY page **524**

5   enables a user to push a survey to any user at any time. A

survey is normally issued at the time of distribution for a

resource.

Fig. 8 shows maintenance and support processes available to

a user after accessing the MAINTENANCE AND SUPPORT LANDING page **600**.

10 The MAINTENANCE AND SUPPORT LANDING page **600** lists the general contact

information for the developer of the ERM software **10** as well as a

current technical representative for the company. The SUPPORT

CONTACT INFORMATION page **602** offers an explanation of the current

version of the ERM software **10** that the associated

15 company/business has running and offers any upgrades and up sell

information from the developer of the ERM software **10**. The

PURCHASE AND/OR INSTALL UPGRADE page **606** enables the company/business

using the ERM software **10** to purchase new upgrades or software

for the ERM software **10** and install the upgrades locally through

20 a web download if possible. The ADMINISTRATIVE APPLICATION SUPPORT

SYSTEM page **608** represents a trouble ticket web service that is

offered to the company/business and is the application by which

the administrator of the company/business handles opened tickets.

The TROUBLE TICKET SYSTEM page **610** handles all of the trouble tickets for the company/business and is the technical online bridge between the company/business and the developer of the ERM software **10**. The trouble ticket system enables a user to open a ticket with a technical representative of the developer of the ERM software **10** and explain the problem online to them. The ticket is then opened and submitted to the developer of the ERM software **10** from WITHIN the ERM software **10**. The ticket enters into the trouble ticket web service of the developer of the ERM software **10** and is responded to automatically by in-house software. The ticket is then assessed by the technical representative and one of three responses is generated: (1) an email **620** is sent with the solution to the problem; (2) a call **622** is made to the company/business for support; or (3) a service representative **624** is sent onsite or online into the ERM software **10** to correct the problem.

Fig. 9 shows communication processes available to a user after accessing the COMMUNICATION LANDING page **700**. The COMMUNICATION LANDING page **700** enables a user to utilize the communications tools of the ERM software **10**. The BULLETIN BOARD LIST page **702** lists current bulletins that may be published on a company/business wide bulletin board. The VIEW BULLETIN BOARD ITEM page **704** enables a user to view the contents of any bulletin that is currently published on the company/business wide bulletin

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board, such as the title, date, body text, or the like. The delete bulletin board item page **706** enables a user to delete a bulletin board item if the user is the owner of the bulletin board item. A fully privileged system administrator may also delete a bulletin board item.

The ADD BULLETIN BOARD ITEM page **708** enables a user to add or update a bulletin board item based on the administrator groupings in the ERM software **10**. A fully privileged administrator may approve or disapprove any bulletin that a subordinate wishes to post. This approval must take place every time a bulletin is added or updated to ensure that the bulletin is qualified to be seen company/business wide. The UPDATE BULLETIN BOARD LIST page **710** enables a user to update any information pertaining to a particular bulletin. The APPROVE/DISAPPROVE BULLETIN page **712** enables a ruling administrator to approve or disapprove a bulletin based on the author and contents. The PUBLISH BULLETIN BOARD ITEM page **714** is hidden to the user, and publishes a bulletin board item to the ERM system and qualifies the bulletin board item for viewing by the company/business's user site.

Fig. 10 shows help and tutorial processes available to a user after accessing the HELP AND TUTORIAL LANDING page **800**. The HELP AND TUTORIAL LANDING page **800** enables a user find answers about the ERM software **10** when the user has a question about the inner workings of the ERM software **10**. This section contains help and tutorial material for the user to become better acquainted with

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the ERM software **10**. The VIEW TABLE OF CONTENTS ON HELP TOPICS page **802** provides a table of contents for help pages by section and category. The SEARCH HELP TOPICS page **804** enables a user to search the entire table of contents for a specific keyword(s) using freeform text. The SEARCH INDEX OF HELP TOPICS page **806** provides an indexed list of keywords to search through in alphabetical order. The SUPPORT CONTACT INFORMATION page **808** provides the support and general contact information for the developer of the ERM software **10**. The FREQUENTLY ASKED QUESTIONS (FAQ) CHART page **810** provides a user with a sectionalized FAQ bank to search through for quick answers to questions. The ONLINE TUTORIALS page **812** links to constantly updated online tutorials that guide administrators and general users through the ERM software **10**.

Fig. 11 shows software user interface processes available to a user after accessing the SOFTWARE USER INTERFACE LOGIN page **900**. The SOFTWARE USER INTERFACE LOGIN page **900** enables an authorized user to login to the ERM system. A username and password is required for entry. A user profile must be approved by an administrator of the company/business to have access through the login software. The SOFTWARE USER INTERFACE LANDING page **902** is the main page that the users land on once logging into the SOFTWARE USER INTERFACE LOGIN page **900**. This page **902** is somewhat different from the administration website and is designed around a simple user. From this section the user can access resources, update personal

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information, payment information, and perform other general tasks needed.

The BACKPAK page **904** displays incentives and awards for users. The BACKPAK page **904** represents a unique marketing tactic to keep users constantly visiting the site. The BACKPAK is used by an administrator of the company/business to offer incentives to users and provide them with a grab bag of offers that they may either choose to accept or turn down. The items that they turn down do not get re-entered into their BACKPAK and are not eligible to be requested by the user after that time. The BACKPAK is meant to spur impulse buys from the ERM software **10**. The SOFTWARE HELP page **906** contains help documentation for the site and enables a user to search through a help index to aid in answering questions.

The BROWSE ITEMS BY CATEGORY page **908** enables a user to browse through existing resources in the ERM system that they have access to through the organizational and distribution groups set up by the administrator of the company/business. The VIEW ITEMS page **910** enables a user to view a particular resource group's properties, such as price, location of resource, or the like. This page **910** also allows users to take action of an item, such as request, enter a raffle, buy the resource, or the like. If the resource happens to be tickets or a resource used by other people the user may create a guest list and invite those guests via an email. The CONFIRM page **912** confirms the request or

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purchase of resources and gathers valuable information, such as shipping location, payment methods, or the like.

The CALENDAR BROWSE ITEMS page **914** enables a user to view a calendar of the year and select certain dates of interest. When a date has been selected, a list of events corresponding to that date will be listed to be viewed by the user. The interactive calendar function also enables requests to be made in case a user would like to attend an event or utilize a resource during a specified day or week and there are no resources or items currently listed. The CODED ITEMS page **916** enables a user to enter in a currently issued incentive code and view items that are listed under that particular incentive code. The USER BULLETIN BOARD page **918** enables users to view bulletins that have been posted by administrators, and enables management to communicate any important messages that must be relayed. The LIST POLICIES page **920** enables an authorized user to post any policies or change of policy concerning the usage of the site and the resources contained within.

The ACCOUNT INFORMATION page **922** displays personal information and user account information. This is the main page that lists a snapshot of a particular account. From here a user may update and access a number of functions related to the user. The UPDATE PERSONAL INFORMATION page **924** enables a user to update their personal information, such as address, phone numbers, name, email, or the like. The UPDATE PAYMENT METHOD page **926** enables a user to update any payment method information that may be

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currently in the ERM database **150**.   The add payment method

enables a user to add a form of payment to use when purchasing or

receiving resources from the ERM system.

A form of payment may be a credit card, E-check, PayPal ID,

cost center ID, or the like.   A company/business manager or

administrator must approve the use of cost center ID.   The DELETE

PAYMENT METHOD page **930** enables a user to delete a form of payment

from their account.   The ERM software **10** may not remove the form

of payment from the ERM database **150** if the ERM software **10** deems

that the payment record is being used by a transaction.   The form

of payment will not show up in inventory but may still be located

in the ERM database **150**.   The VIEW PAST TRANSACTIONS page **932** enables

a user to view their past transactions for use of keeping record

of their previous distributions and/or purchases.   This page **932**

displays their past transactions in a short list.

The VIEW DETAILS OF TRANSACTIONS page **934** displays details of the

transactions either completed or in progress and offers such

details as payment, price, tracking IDs, resource information, or

the like.   The VIEW/COMPLETE SURVEYS page **936** enables a user to view

and/or complete surveys that an administrator may want the user

to complete when the user is viewing transaction details.   If the

user is required to complete a survey or form, this page **936**

enables them to access and fill-out the survey.   When completed,

the user may view their responses from this page **936**.   The TRACK

SHIPMENT page **938** enables a user to track packages that have been

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shipped. This page **938** links to the package carrier's tracking service to deliver package tracking data. The ENTER GUEST LIST page **940** enables a user to handle a guest list for any currently allocated resource in the ERM system. If a resource requires a formal guest list to be completed, the user may enter information such as their guests' name, job title, company, email, or the like. This list may also be used to 'e-vite' the guest and get a confirmation from them over the web.

As described above the variety of users who may use the ERM system may be categorized into groups of users including a SITE ADMINISTRATOR **18**, a SITE ASSISTANT ADMINISTRATOR **20**, an ITEM MANAGER **22**, a GENERAL USER **24**, an INVENTORY/SCHEDULE MANAGER **26**, a REPORT MANAGER **28**, a DISTRIBUTION MANAGER **30**, a SYSTEM ADMINISTRATOR **32**, and a HUMAN RESOURCE MANAGER **34**.

Fig. 12 illustrates a SITE ADMINISTRATOR process layout. A SITE ADMINISTRATOR **2000** has access to every function that the ERM software **10** has available. This role is vital especially in smaller companies where positions must be multitasked due to the lack of an abundance of human resources. The SITE ADMINISTRATOR **2000** is also a primary contact for the developer of the ERM software **10** and is the liaison between their company/business and the developer. An administrator position **2100** may be given to a person who will be spending the most time with the ERM software **10** and knows it the best. This

person receives training and materials from the developer of the ERM software **10** in order to fulfill their role depending on the package they purchase from the developer. They should be available to answer any questions regarding the resources, software, decisions, and is accountable for every other position in the system as they have the ability to alter anything they desire.

In addition to other responsibilities, the administrator **2100** has the ability to update all of the user groups and assign or remove privileges of the system from any user at any time **2120**. The administrator **2100** is responsible for determining job functions and roles of every manager and may suspend them if need be from the ERM system. The administrator **2100** may also alter any manager or user profile for any reason within the system and add or remove them from any group **2140**.

The SITE ADMINISTRATOR **2000** may perform any task of the other types of managers **2160**. The SITE ADMINISTRATOR **2000** has the right to veto any distribution of any resource to any user no matter what level they may be at to correct mistakes or allocate resources for urgent purposes **2200**. The SITE ADMINISTRATOR **2000** may also suspend any transaction that has taken place and refund money to users if need be for money put through the ERM system.

The SITE ADMINISTRATOR **2000** has the ability to update company/corporate account information in the ERM system. This

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information may include company/business address, contacts, billing methods, or the like. In cases of system upgrades the SITE ADMINISTRATOR **2000** is able to enable the system to be upgraded via the web and authorize any work that needs to be done to the ERM system **2180**. The SITE ADMINISTRATOR **2000** may call or place a trouble ticket with the developer of the ERM software **10** if the ERM software **10** is not properly operating and/or the user base is having troubles related to software issues **2220**. The SITE ADMINISTRATOR **2000** may get immediate service from the developer of the ERM software **10**.

Fig. 13 illustrates a SITE ASSISTANT ADMINISTRATOR process layout. The SITE ASSISTANT ADMINISTRATOR **3000** represents a temporary position for an individual who is given temporary rights when the SITE ADMINISTRATOR **2000** is away for personal or business reasons. The SITE ASSISTANT ADMINISTRATOR **300** fulfills both the distribution manager's role and inventory manager's role allowing them to successfully handle all resources until the SITE ADMINISTRATOR **2000** returns. This temporary position may be delegated long term and also may be shaped differently depending on a company/business's desires.

Fig. 14 illustrates an ITEM MANAGER process layout. The ITEM MANAGER **4000** is a counterpart to the DISTRIBUTION MANAGER **8000** (see Fig. 18) and has many of their duties with the exception that the ITEM MANAGER **4000** has control over a limited amount of resources

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that the DISTRIBUTION MANAGER **8000** gives to them. The DISTRIBUTION MANAGER **8000** has control over the entire inventory. The roles of the two managers **4000** and **8000** are very similar to each other.

The ITEM MANAGER **4100** is vital as it breaks the organizational structure into a hierarchy that can be positioned in any way the company/business sees fit. Many companies may use these ITEM MANAGERS **4100** as the head of a cost center would be used. In many cases, a cost center administration may even take on the role of an item manager.

The ITEM MANAGER **4100** is responsible for making sure each employee under them has registered in the ERM system and has been grouped under them **4200** by the HUMAN RESOURCES MANAGER **9000** (see **Fig. 19**). The ITEM MANAGER **4100** is responsible for each of his/her employees and is able to distribute only those resources that upper management sees fit for them to offer. The ITEM MANAGER **4100** is only able to view those resources that are currently under them or pushed into their queue for distribution **4300**. They may do whatever they like with their resources and perform all of the duties that the DISTRIBUTION MANAGER **9000** may perform. They may also see all of the employee profiles under them so that they make sure their group has been registered into the system and that any employees not registered do so **4400**. They do not have the functionality of the HUMAN RESOURCES MANAGER **9000**, but simply the ability to see the users under their management and their

personal information. As stated before, the ITEM MANAGER **4100** can perform all of the duties that the DISTRIBUTION MANAGER **8000** can perform but only on their specific subset of resources.

Fig. 15 illustrates a GENERAL USER process layout. A GENERAL USER **5000** is an employee, client, charity, or other person that may have access to the 'general users' side of the ERM system. This user **5000** has no administrative access although administrators may have access to be a general user. The general user **5000** accesses a special side of the system software that only allows them to view the resources and request, obtain, or buy them from the company/business.

The GENERAL USER **5100** only has access to one side of the ERM software **10** and never has access to the administrative or managerial portions of the ERM system. The general user population comes from a number of sources. The human resource manager **9000** enters the profile of the user in manually, the user enters their own profile into the system, or using a Software Development Kit (SDK), the company/business is able to link and replicate their user database with the ERM database **150**. The company/business is also able to import their current Active Directory users into the system using the ERM software **10**.

The GENERAL USER **5100** may collect their personal information and may only access a very specific portion of the general user site that allows them to enter this information into the ERM

system **5300**. The SITE GENERAL USER **5100** is not able to see anything without proper access into the ERM software **10**. Once all of their personal information is entered into the form fields they must create a login account for the ERM software **10**. When complete, the application for acceptance is passed onto the SITE ADMINISTRATOR **3000** or HUMAN RESOURCE MANAGER **9000** of the system for approval **5320**. If the GENERAL USER **5100** is valid, an administrator or manager will grant them access to the ERM software **5340**. The user will get an email back stating whether they have been granted or denied access to the ERM software **10** when the decision is made. If they are denied, the SITE ADMINISTRATOR **3000** has the ability to add comments as to why they were turned down.

The GENERAL USER **5100** is allowed to see the resources within the ERM system that are available to them. Sometimes the user may see every resource in the inventory. Other times, the company/business may choose to limit what each user sees to the items in the inventory assigned to the managers that control that user. They may search through the inventory in a number of ways, such as by category, date, price, type of distribution, or the like **5120**. There are a number of search interfaces open to the user to find their way to a suitable resource that interests them.

They may, depending on how the resources are being distributed, apply to obtain them **5140**. In the case that a resource is first come first serve they may obtain the resource

themselves without approval. In other cases they must submit their name and wait for a response. Depending on what type of distribution method the user may select a shipment method to obtain the resources as well **5160**. They may select from a

variety of shipment companies, such as UPS, FedEx, the USPS, or the like. Along with this selection, if they must pay for the resources they have to enter a valid form of payment, which may include eChecks, PayPal accounts, credit cards, cost center (if approved), or the like.

While their resources are in-route, if the shipping company has a method for tracking the package the ERM software **10** allows the user to track the package all the way to the package's destination and in some cases sign for the package with their signature on record **5180**. The GENERAL USER **5100** may also view and

update any personal information that they entered upon registration with the exception of their username that is a unique identifier of the account **5200**. This information includes things such as password, address, phone numbers, company, birthday, other items, or the like.

The user account information includes all of their past receipts of resources, distributions involving that account, and transactions linked to their account that occurred within the ERM system **5220**. They may see a description of the resources, date of transaction, account manager, billing information, shipment method, delivery information, guest lists, and other items related to the distribution like forms or surveys required.

Finally, the user may be able to update billing information including adding, updating, and deleting methods of payment like credit cards **5240**. They may apply for the usage of cost center codes in their account, which MUST be approved by a proper administrator (SITE ADMINISTRATOR **2000**, ITEM MANAGER **4000**, DISTRIBUTION MANAGER **8000**, or HUMAN RESOURCE MANAGER **9000**).

Fig. 16 illustrates an INVENTORY MANAGER process layout. An INVENTORY MANAGER's **6000** job begins with procurement. The INVENTORY MANAGER **6000** looks at the overall stock of the company/business, the value needed from entertainment resources, the current inventory of the company, and the current budget to formulate what resources are needed by the company/business to fulfill the company/business's needs.

During the procurement phase **6020**, the INVENTORY MANAGER **6000** looks at his/her statistics from the previous and current year to aid in determining what resources to purchase. The INVENTORY MANAGER **6000** also reviews archived data to calculate trends and demands. The INVENTORY MANAGER **6000** analyzes the current clients and target sales of the company/business to find out what kind of return can be made on specific resources and reviews the patterns and track record of the sales teams to get a handle on what clients respond best to business entertainment. All of these factors go into to making decisions on what resources to purchase for the company. Such thought and analysis are normally done outside of the ERM system. However, the ERM software **10** may also

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be configured to provide a user with links to outside resource(s) to assist in making such decisions.

At the makes initial round of resource buys stage **6040** the INVENTORY MANAGER **6000** has assessed what resources need to be purchased and begins to buy them from teams, venues, and vendors. This process may go on outside the ERM system in a manner where the manager or procurement officer keeps the purchase receipts. The ERM software **10** may also be configured to carry out this process stage. The purchases are compiled into one list or a master resource list **6060** that is then available for those individuals who need it. This list is then used later to refer to and each item is assigned an ID that is filed against the master list. A human resource or entertainment manager makes a list of yearly resources in house **6080**. The particular manager(s) is/are responsible for all of the resources purchased for employees and internal use that could be distributed via the ERM software **10** to itemize a list of these resources. A list of internal resources that are available for distribution in the ERM system is sent **6100** to the INVENTORY MANAGER **6000**.

Out of all the resources that come into the INVENTORY MANAGER **6000** there are specific ones that need to be used for predefined purposes. These resources can be designated as earmarked for the proper employee or client before they are even entered into the system. Many times, the company/business may go through a process similar to a draft pick of these

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resources **6120**. This list of resources is entered into the ERM system using the necessary software utilities in the ERM system. At this point the ERM software **10** is aware of the resources and becomes the driver behind the distribution and tracking **6140**. These resources may also be entered into the system by the INVENTORY MANAGER **6000** but not acted upon in any way by them. There is a fine line between distribution and the data entry and modification of the actual resource.

Concurrently, as this process moves forward the INVENTORY MANAGER **6000** or procurement officer may look into the purchase of more resources as needed. The INVENTORY MANAGER **6000** may review the concerns of their sales department and client entertainment needs on the fly and react by obtaining what is required **6160**. These new resources are purchased and are generally earmarked because they are purchased on a need-based requirement **6180**. Therefore, the list of who the resource is being earmarked for is created and handed to the INVENTORY MANAGER **6000** for the ERM software **10**.

The data input step occurs and the resource is placed into the system to be managed just like the rest **6200**. If the earmark becomes irrelevant the resource may go unallocated and is dealt with like the rest of the inventory. If the resource must be modified in any way the INVENTORY MANAGER **6000** has the ability to alter the characteristics of the item **6220**. If a resource group must be updated or deleted, the inventory manager may perform this action at any time on the condition that the resource has

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not been fully allocated and shipped and/or paid for by a user. If at any point the inventory manager deems that a resource must be used for a specific purpose, they may earmark the resource at any time for that purpose provided that any owners of the resource be made aware that it is no longer available for allocation **6240**. The ERM software **10** handles the ability to notify any of the owners of the resource in the event that the resource must be confiscated for another use.

The INVENTORY MANAGER **6000** may view a list of the inventory at any time **6260** and search by a number of different factors, such as date, price, owner, event name, or the like. This inventory displays all of the vital information concerning the associated resource group. The INVENTORY MANAGER **6000** may also take over the role of physical distribution since they are usually the ones that are physically in control of the resources. They can view a list of all of the resources that need to be shipped or given out including where the resources must be delivered.

The INVENTORY MANAGER **6000** is able to print out shipping labels and envelopes to physically mail the resources **6280**. At this time, the list of packaging materials that must be included with the resource can be seen by the INVENTORY MANAGER **6000** so they can pack the item up to be shipped. The INVENTORY MANAGER **6000** or designated representative may physically drop the package off to be shipped **6300**.

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Fig. 17 illustrates a REPORTING MANAGER process layout. The REPORTING MANAGER **7000** plays a vital role in the management of resources within the company/business. This position is usually filled with business analysts that are in charge of determining the impact that these resources make on employee satisfaction, client satisfaction, client retention, and client pickup. The REPORTING MANAGER **7000** is able to see a snapshot of the productivity and performance of the ERM software **10** through built-in and managed statistical services.

One of the first jobs that the REPORTING MANAGER **7000** can perform is the collection and review of survey and form data that was emailed out to a user to be filled out **7020**. This information is already stored in the ERM database **150** and can be accessed at any time by the REPORTING MANAGER **7000**. The data may contain important survey information about enjoyment of the resource or tax information needed when entertaining clients.

The data that is stored from the surveys and forms comes in two forms. The ERM software **10** can breakdown down the data for individuals or may compile the data for the REPORTING MANAGER **7000** in order to quickly gather quantitative or qualitative information concerning the resources **7040**. This information can also be broken down into types of returns such as charities, clients, employees, sales representatives or managers. From each group, data can be processed and used in a number of formats.

Once the data collected from the user feedback is pulled and compiled from the system **7060**, the REPORTING MANAGER **7000** is then able to complete vital tax information, quarterly/yearly reports, employee survey reports, client satisfaction analysis, and other company/business specific items needed for the survival of the company/business. These reports can then be handed to the appropriate departments for review and action in the future **7080**. For example, the client satisfaction surveys yield the result for current client retention based on the approval ratings of the business' customers. These reports may play a vital role in partnership planning, future client appreciation ventures, and pre-purchase of resources for the next year.

A reporter or business analyst **7100** has a number of reporting devices on hand built into the ERM software **10** to aid them in their job. The ERM software **10** is fully capable of returning set results as set forth by the REPORTING MANAGER **7000** for analysis. This means that the REPORTING MANAGER **7000** presets the ERM software **10** and configures the statistical returns to streamline the reporter/business analyst **7100** workflow. The ERM software **10** may also log and print out preformed reports with existing analysis in them.

This REPORTING MANAGER **7000** may need several pieces of information for in depth analysis **7120**, such as a procurement list of existing resources, a list of clients and important sales, and a list of internal entertainment that the

company/business facilitates. The procurement list and client/sales may be found in the ERM software **10** depending on how in depth the business uses the ERM software **10**. These lists may help in future reporting and comparative analysis that the ERM system provides.

The ERM software **10** contains a number of statistical reporting tools, such as resource, client, employee, management, sales, cost center, monetary, usage, waste percentage, distribution time, and charitable donation analysis, or the like. From this pool, the REPORTING MANAGER **7000** may pull and compare any number of statistics that is vital to their job function **7140**. The ERM software **10** may also produce dynamic graphs and charts that allow users to visually gather statistics. The ERM system may utilize custom developed software within the ERM software **10** or may charge the task to third party software. These graphs/charts are dynamic and allow for interaction between the visual representation of the data and the actual data inside the ERM database **150**. By interacting with these graphs/charts users may pull up more specific data that is needed. For example, a visual representation of a graph/chart may show an inventory quantity in months along the x axis in bars. A user may then use a computer mouse to click on a particular month bar, such as January, and a daily breakdown of the inventory in the month of January may be displayed in bars rather than the monthly breakdown of the inventory.

The ERM software **10** may produce a report that measures the usage of the inventory and resources at hand **7160**. Every report focuses on this one aspect in one way or another. The ERM system is configured to maximize the usage of resources within any company/business effectively and efficiently. From these statistics, even though the survey and form information may be accessed independently, the reporting software may gather quantitative data from these forms and average the data out **7180** for the REPORTING MANAGER **7000**. This is the precompiled portion of that data that is available in cooperation with the other reporting features of the ERM system.

An option that is built into the ERM software **10** is a GETSMART ANALYSIS TOOL **7200**. This reporting feature makes intelligent suggestions based on the data that comes into the system. This part of the ERM software **10** may offer tips on procurement, employee usage, and other management decisions. The ERM software **10** is meant as a supplemental analysis and not a decision making process. If the manager chooses not to use the GETSMART feature **7200** of the reporting tools, the next step is to take the findings and begin to compile them into a usable form for the company/business **7220**. This data must be analyzed and reviewed in order to put it into a readable format. Finally, the reporting manager uses the analysis in making decisions that will aid the company/business in more efficiently managing corporate resources · and streamline the process that is already in

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place **7240**.   This data is handed off to other administrators and procurement officers who gather the resources to begin the process all over again.

Fig. 18 illustrates a distribution manager process layout. The DISTRIBUTION MANAGER **8000** within the ERM system effects critical decision making processes of how and to whom the resources are distributed.   There is a very close connection between the DISTRIBUTION MANAGER **8000** and the ITEM MANAGER **4000**.   These two are very close in functionality but play vital roles and warrant a distinction within the ERM system.   The DISTRIBUTION MANAGER **8000** handles all distribution of resources from the inventory to the actual shipment to the end user.   The ITEM MANAGER **4000** is given resources by the DISTRIBUTION MANAGER **8000** to spread amongst a limited group.   An analogy may be made to a wholesale and retail store.   The wholesaler manager can either disseminate his/her resources to a retail store or the general public (e.g., the DISTRIBUTION MANAGER **8000**).   The retail store receives a set of resources and sells them to the general public alone (e.g., the ITEM MANAGER **4000**).

Each DISTRIBUTION MANAGER **8020** is designated depending on how much they deal with the distribution of resources to their employees.   This DISTRIBUTION MANAGER **8020** is given the right to make independent choices on where the company/business resources should go.   The DISTRIBUTION MANAGER **8020** acts as a trafficker of resources for the company/business and either distributes them

himself/herself or delegates that responsibility to an ITEM MANAGER **4000**.

The DISTRIBUTION MANAGER **8020** may go into the system and view the inventory but not alter it. This person **8020** acts solely on the notion that whatever is the inventory at a particular time must be used, sold, or given away. The DISTRIBUTION MANAGER **8020** may see the current inventory along with any comments about the resources and if they have been earmarked to be distributed to someone already. At this point, if the resource is not earmarked the DISTRIBUTION MANAGER **8020** may decide on how to use the resource or the method of distribution. The item may be given away in a variety of ways.

Resources may be given away through a raffle. When an item is raffled, a number of users apply to enter the raffle and when the DISTRIBUTION MANAGER **8020** is ready, he/she closes off the raffle to any more entries and the ERM software **10** automatically selects a user from the group that entered. The DISTRIBUTION MANAGER **8020** has the choice to either weight the raffle or not. By weighting the raffle, users who have not received as many resources from the system will be more likely to win but NOT guaranteed.

Another type of distribution is to earmark resources. The DISTRIBUTION MANAGER **8020** may mark a resource as already distributed even though it may not be used yet. The earmark may be for a whole division, a manager, or just one person. Another way resources may be distributed is through a first come first serve

method where certain users may claim the resources according to what their particular group is. These resources may either be for sale or free. Resources may also be distributed by request. Each user may make a request for a resource and either the DISTRIBUTION MANAGER **8000** or ITEM MANAGER **4000** may approve or deny the request.

Resources may also be distributed amongst users through reselling. The ERM software does not actually make transactions of resources but keeps track of them. A company/business may want to make money back from their employees. This normally occurs at organizations but the employees pay for them via check or cash and the process is not consolidated. The ERM software **10** may place resources up for resale in a particular system and employees may buy them with credit cards which are charged through associated credit card service systems. The ERM software **10** may link to credit card service systems and obtain actual billing information for particular transactions.

Along with the standard information, a unique feature of the ERM software **10** is the ability of the users requesting the resources to enter a guest list for any resource. If the resource has to do with an event involving multiple tickets, the administrators or managers may request a guest list be filled in to allow them to view who will be attending a particular event. If the guest list meets the satisfaction of manager, they may use this information to decide who gets the resource. The guest list is completed by a general user with information such as name,

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title, company, age, or the like. General users may send email invitations through the ERM system to those person(s) on the guest list and, depending on how the company/business installs the ERM software **10**, the guests may reply confirming their attendance and information via email or through an external link to the ERM software **10**. This list may also be matched against the internal list of clients to provide tracking information about important clients.

If the distribution is done via a raffle **8060**, the DISTRIBUTION MANAGER **8020** may decide to lock the raffle down and not let any more users apply for the resources. At any time the DISTRIBUTION MANAGER **8020** may manually add users into the raffle before the raffle is run or decide to cancel the raffle altogether. Once the DISTRIBUTION MANAGER **8020** is ready, he/she initiates the ERM software **10** to chose a winner of the raffle. Once the ERM software **10** decides the winner of the raffle, the user is notified of their winnings and the DISTRIBUTION MANAGER **8020** has a chance to provide a final approval of the winner or let the ERM software **10** approve the winner **8080**. This process may be done via email and through the general user software functionality. An email may be generated and sent to the user with a link back to the ERM software **10** providing it with their decision.

When the DISTRIBUTION MANAGER **8020** decides to offer the resources in another manner such as earmark them, let users

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request them, let users buy them, or claim them for free, the DISTRIBUTION MANAGER **8020** determines the suitability of the users to have access to the resources **8100**. For example, if three users request a resource the DISTRIBUTION MANAGER **8020** may determine which one would receive the resource. If a resource is earmarked the DISTRIBUTION MANAGER **8020** may have the ability to give the resource to a particular user or veto the distribution and give the resource to another user. At this point, no matter what method of distribution is used, the DISTRIBUTION MANAGER **8020** decides if the user receiving the resources is suitable. Once a user is notified that they will receive the resource, the manager confirms their decision **8120** and passes the resource along to the next stage to be sent to the owner of the resource.

At this point **8140**, the owner of the resources has been established and the resource needs to get from its present location into the hands of its new owner. The DISTRIBUTION MANAGER **8020** must decide which method of shipment or transfer will take place. They may choose from a variety of methods including integrated shipping solutions providers such as UPS, FedEx, USPS, or the like. They may also choose to deliver the resources via an internal mail system. By choosing a particular method for receiving the resource an appropriate shipping label or envelope may be created. If a shipping label must be created, the ERM software **10** stores a label for printing by whoever needs to do

so. The ERM software **10** also keeps track of the cost of shipping, delivery date, and various rates packages.

A final bill is generated (much like an invoice) to detail the entire record of the resource from the owner to the form of reimbursement to the shipment method **8160**. The DISTRIBUTION MANAGER **8020** must finally approve the invoice and the resource is then marked for distribution to the correct owner. The reimbursement to the company/business for the resources is decided before the user accepts the resources but may come from the user, the company/business (as a sunk cost when purchasing the resource), or an outside source (such as a write off for charitable donation).

As the resource is shipped to the new owner the DISTRIBUTION MANAGER **8020** may track the package **8180** to the destination using built in third party tracking functions provided by UPS, FedEx, the USPS, or the like. At this point, the manager may also issue a survey or follow-up information gathering forms to the user for internal statistical reasons or tax purposes. These surveys and forms are dynamic and may be made up by the company/business at any time for any reason.

Many times if the resource has been purchased from a venue or location requiring parking the user of the resource or tickets may require a parking pass to enter the event. If a parking pass or other material that needs to be returned to the company/business is shipped with the resource, the DISTRIBUTION MANAGER **8020** at this point handles the follow up for that material

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collecting it as needed **8200**. If any materials that need to be returned to the company/business by the user, such as a parking pass, are included with the package being sent, the DISTRIBUTION MANAGER **8020** has the option of generating a return shipping label to be included with the package so that the owner of the resources does not have to pay for the shipment.

There may be cases when the DISTRIBUTION MANAGER **8020** may choose to offer the resource on a first come first serve basis **8220** without concern for who uses the resource just as long as the resource is used. When a general user decides to utilize a resource on this basis the DISTRIBUTION MANAGER **8020** at any time may review who attained the resource and when. The DISTRIBUTION MANAGER **8020** may view a detailed report of what resource is going to who and when they are scheduled to receive the resource. Depending on the company/business policy, there are situations in which the resource might be needed elsewhere and this review process may be needed in those situations. If needed the distribution manager may veto the distribution of a resource **8260** given the proper rights and they may confiscate the resource for use elsewhere. If desired, the DISTRIBUTION MANAGER **8020** may issue a survey or form to a user who received a resource on a first come first serve basis and email them an interactive form to attain the information needed from them **8240**.

In the event that a resource was either misused or disapproved for use, the ERM software **10** offers a failsafe

allowing a DISTRIBUTION MANAGER **8020** to veto any distribution so that for whatever reason, the resource may be used in another fashion. This grants the DISTRIBUTION MANAGER **8020** significant rights when handling all inventory and it is left to the company/business to delegate responsibility and rights to their DISTRIBUTION MANAGERS **8020** to handle this function properly.

Similarly, the DISTRIBUTION MANAGER **8020** may play a larger role in handling the delegation of responsibility of inventory to certain administrators. This DISTRIBUTION MANAGER **8020** has the right to pass resources onto secondary 'ITEM MANAGERS' to distribute resources to a smaller group of users **8280**. This ability allows the DISTRIBUTION MANAGER **8020** to remove himself/herself from choosing who receives tickets and places them in a managerial role over more secular managers. This function is a major advantage in larger companies that may have regional centers and allows the company/business to centralize the procurement process without centralizing the distribution process. Likewise the company/business may choose not to do so giving the ERM software **10** a wide range of flexibility.

In similar form, the DISTRIBUTION MANAGER **8020** may veto or remove resources at any time from the care of item managers for use in other places **8300**. This process allows lateral and upward mobility when handling the distribution without having to physically move the resource around. Much like the ITEM MANAGER **4000**, the DISTRIBUTION MANAGER **8020** may also have the right to

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view a list of allocated resources and determine where they must be sent **8320**. This allows the distribution manager **8020** to take on the role of shipment and tracking if needed without having the responsibility of managing the inventory as well.

At this point, the DISTRIBUTION MANAGER **8020** may print out the labels and stuff the package with whatever materials the company/business wishes to send **8340**. The package materials may also be printed from the ERM software **10** including company/business resource utilization policies or behavior policies that they wish the user to receive along with the resource. Finally, the DISTRIBUTION MANAGER **8020** may physically ship or send the resources **8360** to the new owner for them to enjoy.

The system administrator **32** handles the upkeep and alterations for the ERM software **10** including all maintenance, updates, patches, and upgrades. The system administrator **32** has the rights to enter into a development environment with the ERM software and make changes as necessary to meet all customer and performance expectations. This person **32** may make changes to the ERM software **10** and the ERM software environment when given access rights to the platform on which the ERM software **10** is hosted.

The system administrator **32**, once having access rights to ERM software **10** being used by a particular business/company, is

able to make updates to the ERM software **10**, and troubleshoot and fix software bugs within the ERM software **10**. The system administrator may also perform upgrades to the ERM software **10** and install patches on the ERM software **10**, as well as run performance analysis software against the ERM software **10** to ensure the ERM software **10** is running at customer approved standards. The system administrator **10** may also update and modify database structures and data inside the ERM software **10**.

Fig. 19 illustrates a human resource manager process layout. The HUMAN RESOURCE MANAGER **9000** handles the user base of the ERM software **10**, and is a vital role in keeping up with the employee base and making sure that the users that are allowed into the ERM system are ones that need to use the system. As employees change frequently at larger companies the HUMAN RESOURCE MANAGER **9000** makes sure that every employee record is kept up to date and the information that is currently in the ERM database **150** matches that company/business's employee database. The HUMAN RESOURCE MANAGER **9000** also tracks and handles any activity related to employee action such as incentives or reprimands.

The HUMAN RESOURCE MANAGER **9000** deals with the hiring and firing activities **9020** of the company/business. The scope of the ERM software **10** does not encompass this function but the user performing the role of HUMAN RESOURCE MANAGER **9000** should have some

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insight into the process of employee gain and loss. This way the HUMAN RESOURCE MANAGER **9000** is able to keep the ERM database **150** up to date.

The information about the user should be collected upon hiring and stored in a record **9040** somewhere at the company/business. The ERM system may have access to this ERM database **150** of employees or may not depending on the technology that is used in house. By using the user import SDK (Software Development Kit), the company/business can create a bridge between the ERM system and that of the human resources employee records to make user updates easier and more automated. The ERM software **10** also contains a bridge between the ERM system and the Active Directory structure of the company/business that links the two upon the consent of the company/business.

Each employee who enters the ERM system may be given some sort of 'primary key'. This key should be unique to each user and may be a means to distinguish between employees **9060**. The system may maintain a special record that is open to any type of unique ID that the company/business wishes to use in a proprietary format. This ID may be matched against the company/business system and the data concerning the user may be extrapolated and formatted to link the two systems together.

The company/business may be given an SDK for the ERM system that allows them to link to the ERM system in any way they wish using a standard protocol **9080**. This protocol may be a web service interfacing with the ERM software **10** they are running

currently to manage their employee ERM database **150**. Providing this system may be an integral part of versions to ease the login process and aid in the decrease of time spent with data input. This web service may only interface between their proprietary system and the ERM software **10** given a valid license key.

Within the ERM system, if the company/business chooses to develop a bridge between the ERM software **10**, the ERM software **10** may provide an option to replicate the current state of the company's human resource software database given the correct plug-in and license **9100**. If the company/business does not have the option to replicate the employee or user database, employee/users are manually entered into the system and assigned specific groups and permissions to each **9120**. Similarly, the user has an option to visit the web application and apply for membership to which the manager may either accept the user and a valid entry or reject the membership for whatever reason.

At any time, the manager may update or remove a user from the ERM system **9140** by editing their account information. The ERM software **10** also responds excellent to directional movement when grouping users whether it is up, down, or lateral within the organizational structure of the company/business. The manager simply needs to modify the group settings and the user gains or loses privileges depending on the transfer of rights.

The organization of a company/business is mainly based around a hierarchy **9160** and is reflected with the ERM

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software **10**. Outside of the ERM system, the organizational structure is forged. This structure may easily be ported into the ERM software **10** and may be reflected immediately in the rights and groupings of users. The 'Org. Chart' is key in determining who manages whom in the world of human resources. Usually this chart is recorded and is available to most personnel for reference reasons.

The organizational structure of the company/business may be entered into the ERM system **9180** to be used as a guideline for user rights. This structure may play a vital role in determining which users may see which resources. The organization always begins with the company/business name as the root node in the tree and the organization is built from this seed. In an uncomplicated and completely unique way the HUMAN RESOURCE MANAGER **9000** may build the entire company/business structure from scratch and use this similar to the active directory trees that a Microsoft network utilizes.

The structure of the company/business may be modified in any way **9200**. As a convenient functionality, the ERM software **10** has built in a self-healing linkage system that may automatically shift rights depending on the change that is made to the organizational chart. If a node is removed from the tree, users shift to the next level up from the deleted branch and laterally if needed when one branch is sewn onto another. At all times, the users maintain the rights that the human resource manager sets forth for them.

An employee may either behave poorly or well on the job. Many companies/businesses keep track of employee incentive and punishment on record **9220**. As either good or bad reports filter in, the HUMAN RESOURCE MANAGER **9000** files them in an employee record

for internal use. The ERM software **10** enables these behaviors to be either be rewarded or penalized via distribution of resources.

In the ERM system, the users may be offered rewards for good behavior and also may be penalized for bad behavior **9240**. The HUMAN RESOURCE MANAGER **9000** may have the option to flag an employee

for misconduct or poor performance that may affect their chances of receiving resources that may be better used with another employee. The user may also be banned or blacklisted from certain events if needed. In extreme cases, the employee may be suspended or even banned from the system. On the other hand, the

employee might be offered incentives by issuing incentive codes which allow the user to access or obtain certain resources that might not have been previously open to them without the code.

Human resources are usually the department that disseminates company-wide information such as newsletters and bulletins. This

information is compiled out of the system and is made ready for certain groups or mass distribution **9260**. The HUMAN RESOURCE MANAGER **9000** may choose to issue a bulletin **9280** that employees may see on the general user site to relay vital information needed for day-to-day operation of the ERM software **10** or just as a daily reminder of certain events. This information may be

controlled by the system administrator and may be made available on a group-to-group basis if preferred. The system also allows the HUMAN RESOURCE MANAGER **9000** to mass email the company/business with information **9300** as needed or to create groups of users similar to the contact and email groupings that Microsoft Outlook provides. These email groupings may be created manually or automatically using the organizational chart structure in the ERM software **10**.

Fig. 20 illustrates the table list **10000** of the ERM database **150**. The tables included in the TABLE LIST **10000** include USER **10100**, USER (HASH TABLE) **10120**, EVENT **10140**, EVENT CATEGORIES **10160**, VENUES **10180**, RAFFLES **10200**, GROUP TABLE **10220**, STATISTICS GROUP **10240**, FLAGGED **10260**, TRANSACTION TABLE **10280**, CHARITIES **10300**, SHIPPING COMPANY **10320**, SHIPMENT **10340**, GUEST LIST **10360**, CLIENT LIST **10380**, INCENTIVE CODES **10400**, UNPUBLISHED RESOURCES **10420**, UNPUBLISHED RESOURCE GROUP **10440**, RESOURCE GROUP **10460**, RESOURCES **10480**, EARMARKED **10500**, DEPARTMENTS ORGANIZATIONAL CHART **10520**, PAYMENT METHODS **10540**, COMPANY LICENSE INFORMATION **10560**, BULLETINS **10580**, REQUEST **10600**, SURVEY RESPONSES **10620**, SURVEY QUESTIONS **10640**, SURVEY FORMS **10660**, RAFFLE USER LINK **10680**, REQUEST USER LINK **10700**, FAN LIST **10720**, AREA LIST **10740**, EMAIL GROUP **10760**, EMAIL LIST **10780**, TROUBLE TICKET **10800**, AREA GROUPS **10820**, COST CENTER **10840**, and UPS SHIPPING CODES **10860**.

The TRANSACTION TABLE **10280**, SHIPMENT **10340**, GUEST LIST **10360**,

INCENTIVE CODES **10400**, UNPUBLISHED RESOURCES **10420**, UNPUBLISHED RESOURCE

GROUP **10440**, RESOURCE GROUP **10460**, RESOURCES **10480**, EARMARKED **10500**,

BULLETINS **10580**, REQUEST **10600**, SURVEY RESPONSES **10620**, RAFFLE USER

LINK **10680**, and REQUEST USER LINK **10700** tables contain time sensitive

data. Time sensitive tables are ones that are looked over

regularly by the ERM system and analyzed for alerts and clean up

processes.

Figs. 21A through **21D** show the first set of the ERM

database **150** table structures. The ERM database **150** table

structure for USER **11000** includes the fields FIRST NAME, LAST NAME,

MIDDLE INITIAL, HOME ADDRESS, HOME PHONE, CELL PHONE, BUSINESS ADDRESS,

BUSINESS PHONE, EMAIL ADDRESS, USER NAME, PASSWORD, GROUP ID, HASH ID, USER

ID, and DEPARTMENT ID. The ERM database **150** table structure for

GROUP TABLE **11020** includes the fields GROUP ID, GROUP NAME, GROUP

DESCRIPTION, and GROUP MASTER ID. The ERM database **150** table

structure for FLAGGED **11040** includes the fields FLAG ID, USER ID,

EVENT TYPE ID, DESCRIPTION, SUSPENDED, BLACK LISTED, and EVENT ID. The

ERM database **150** table structure for CLIENTS **11060** includes the

fields CLIENT ID, NAME, ADDRESS, BUSINESS PHONE, CELL PHONE, CELL PHONE,

CONTACT NAME, SALES CONTACT, COMPANY CONTACT, and FAX NUMBER. The ERM

database **150** table structure for CHARITY **11080** includes the fields

CHARITY ID, NAME, CONTACT NAME, ADDRESS, BUSINESS PHONE, CELL PHONE, FAX

NUMBER, COMPANY CONTACT, and CHARITY WRITE-OFF ID. The ERM database **150**

table structure for GUEST LIST **11100** includes the fields GUEST ID, USER ID, RESOURCE GROUP ID, CLIENT ID, CHARITY ID, NAME, JOB TITLE, and COMPANY COUNTER PART ID.

The ERM database **150** table structure for ORGANIZATION CHART **11120** includes the fields ORGANIZATION ID, ORGANIZATION DEPARTMENT, NAME, ORGANIZATION PARENT DEPARTMENT, ORGANIZATION DEPARTMENT DESCRIPTION, ORGANIZATION DEPARTMENT MANAGER ID, and ORGANIZATION DEPARTMENT COST CENTER ID. The ERM database **150** table structure for COST CENTER **11140** includes the fields COST CENTER ID, COST CENTER CODE, COST CENTER MANAGER ID, COST CENTER CONTACT NUMBER, and COST CENTER FAX NUMBER. The ERM database **150** table structure for RESOURCE GROUP **11160** includes the fields RESOURCE ID, RESOURCE CATEGORY ID, RESOURCE NEIS ID, RESOURCE NAME, RESOURCE DESCRIPTION, RESOURCE SECTION, RESOURCE ROW, RESOURCE FACE VALUE, RESOURCE PRICES, and RESOURCE GROUP VARS. The ERM database **150** table structure for RESOURCE **11180** includes the fields RESOURCE ID, RESOURCE GROUP ID, RESOURCE SEAT, RESOURCE DESCRIPTION, and RESOURCE VARS.

The ERM database **150** table structure for UNPUBLISHED RESOURCE GROUP **11200** includes the fields UNPUBLISHED RESOURCE ID, UNPUBLISHED RESOURCE CATEGORY ID, UNPUBLISHED RESOURCE NEIS ID, UNPUBLISHED RESOURCE NAME, UNPUBLISHED RESOURCE DESCRIPTION, UNPUBLISHED RESOURCE SECTION, UNPUBLISHED ROW, UNPUBLISHED RESOURCE FACE VALUE, UNPUBLISHED RESOURCE PRICE, and UNPUBLISHED RESOURCE GROUP VARS. The ERM database **150** table structure for UNPUBLISHED RESOURCES **11220** includes the fields UNPUBLISHED RESOURCE ID, UNPUBLISHED RESOURCE GROUP ID, UNPUBLISHED RESOURCE SEAT, UNPUBLISHED RESOURCE DESCRIPTION, and UNPUBLISHED RESOURCE VARS. The

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ERM database **150** table structure for EARMARKED **11240** includes the fields EARMARKED ID, RESOURCE ID (GROUP), ORGANIZATION ID, USER ID, COST CENTER ID, and COMPANY CONTACT ID. The ERM database **150** table structure for INCENTIVE CODE **11260** includes the fields CODE ID, CODE, USER ID, RESOURCE ID, CODE USED, and DATE REDEEMED. The ERM database **150** table structure for TRANSACTION **11280** includes the fields TRANSACTION ID, TRANSACTION RESOURCE ID, TRANSACTION USER ID, TRANSACTION GUEST LIST ID, TRANSACTION SURVEY ID, TRANSACTION SHIPMENT ID, TRANSACTION PAYMENT METHOD ID, TRANSACTION DATE, TRANSACTION RESOURCE OWNER, TRANSACTION REQUEST ID, TRANSACTION RAFFLE ID, TRANSACTION EARMARK ID, and TRANSACTION VARIABLES.

The ERM database **150** table structure for SHIPMENT COMPANY **11300** includes the fields SHIPMENT COMPANY ID, SHIPMENT COMPANY NAME, SHIPMENT COMPANY DESCRIPTION, SHIPMENT COMPANY ADDRESS 1, SHIPMENT COMPANY ADDRESS 2, SHIPMENT COMPANY CITY, SHIPMENT COMPANY STATE, SHIPMENT COMPANY USER NAME, and SHIPMENT COMPANY PASSWORD. The ERM database **150** table structure for SHIPMENTS **11320** includes the fields SHIPMENT ID, SHIPMENT TRACK CODE, SHIPMENT TYPE, SHIPMENT COMPANY, SHIPMENT DELIVERY STATUS, SHIPMENT SHIP DATE, SHIPMENT RECEIVE DATA, SHIPMENT FROM ADDRESS ID, and SHIPMENT TO ADDRESS ID.

Figs. 22A through **22D** show a second set of ERM database **150** table structures. The ERM database **150** table structure for SHIPMENT TYPE CODE **12000** includes the fields SHIPMENT TYPE ID, SHIPMENT CODE, and SHIPMENT NAME. The ERM database **150** table structure for PAYMENT METHODS **12020** includes the fields METHOD ID, USER ID, CREDIT CARD NUMBER, CREDIT CARD TYPE, CREDIT CARD EXPIRATION MONTH, CREDIT CARD

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EXPIRATION YEAR, CREDIT CARD NAME ON CARD, COST CENTER ID, AUTHORIZED COST CENTER USE USER ID, CREDIT CARD ADDRESS 1, CREDIT CARD ADDRESS 2, CREDIT CARD CITY, CREDIT CARD STATE, CREDIT CARD ZIP, and CREDIT CARD AUTHORIZE CODE. The ERM database **150** table structures for SURVEY QUESTIONS **12040** includes the fields QUESTION ID, QUESTION TEXT, QUESTION TYPE, and QUESTION RANGE. The ERM database **150** table structure for SURVEY FORMS **12060** includes the fields FORM ID, FORM NAME, and FORM Q1 - Q20. The second set of database table structures for SURVEY RESPONSE **12080** includes RESPONSE ID, USER ID, RESPONSE R1 - R20, RESPONSE VARS, and RESPONSE DATE.

The ERM database **150** table structure for EMAIL GROUPS **12100** includes the fields GROUP ID, GROUP NAME, GROUP, IMPORTANCE, AND GROUP ORGANIZATION ID. The ERM database **150** table structure for EMAIL LIST includes the fields LIST ID, GROUP ID, USER ID, and EMAIL ADDRESS. The ERM database **150** table structure for FAN LIST **12140** includes the fields FAN ID, USER ID, ORGANIZATION ID, and NEIS EVENT TYPE ID. The ERM database **150** table structure for BULLETINS **12160** includes the fields BULLETIN ID, OWNER ID, APPROVED ID, BULLETIN TEXT, and BULLETIN DATE. The ERM database **150** table structure for REQUEST **12180** includes the fields REQUEST ID, REQUEST DATE, REQUEST RESOURCE ID, REQUEST VARS, REQUEST USER ID, and REQUEST MANAGER ID. The ERM database **150** table structure for RAFFLE **12200** includes the fields RAFFLE ID, RAFFLE DATE, RAFFLE RESOURCE, ID, RAFFLE VARS, and RAFFLE OWNER ID.

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The ERM database **150** table structure for RAFFLE USER LINK **12220** includes the fields LINK ID, RAFFLE ID, RAFFLE USER ID, and LINK VARS. The ERM database **150** table structure for TROUBLE TICKET **12240** includes the fields TICKET ID, TICKET NAME, TICKET USER ID, TICKET HANDLER ID, TICKET TEXT, TICKET START DATE, TICKET STATUS, TICKET CLOSE DATE, TICKET VIEWS, and TICKET IMPORTANCE. The ERM database **150** table structure for AREA LIST **12260** includes the fields AREA ID, AREA GROUP ID, and AREA USER ID. The ERM database **150** table structure for AREA GROUP **12280** includes the fields AREA GROUP ID, AREA NAME, AREA DESCRIPTION, and AREA ORGANIZATION ID.

The ERM database **150** table structure for COMPANY LICENSE INFORMATION **13000** includes the fields COMPANY NAME, COMPANY ADDRESS 1, COMPANY ADDRESS 2, COMPANY CITY, COMPANY STATE, COMPANY ZIP, COMPANY CONTACT NAME, COMPANY PHONE, COMPANY CELL PHONE, COMPANY FAX NUMBER, COMPANY EMAIL ADDRESS, COMPANY VERSION NUMBER, COMPANY LICENSE CODE, COMPANY USER NAME, COMPANY PASSWORD, COMPANY UPGRADE LAST, COMPANY START DATE, COMPANY BALANCE PAYMENT, COMPANY BILLING INFORMATION, COMPANY BILLING INFORMATION, COMPANY PAYMENT CREDIT CARD NUMBER, COMPANY CREDIT CARD NAME ON CARD, COMPANY CREDIT CARD TYPE, COMPANY CREDIT CARD EXPIRATION DATE MONTH, COMPANY CREDIT CARD EXPIRATION DATE YEAR, COMPANY CREDIT CARD ADDRESS 1, COMPANY CREDIT CARD ADDRESS 2, COMPANY CREDIT CARD CITY, COMPANY CREDIT CARD STATE, COMPANY CREDIT CARD ZIP, COMPANY REPRESENTATIVE NAME, COMPANY REPRESENTATIVE ADDRESS, COMPANY REPRESENTATIVE CELL NUMBER, and COMPANY REPRESENTATIVE FAX.

Fig. 23 illustrates a relational database flowchart associated with the ERM software **10** and ERM database **150**. The

flowchart shows the interaction between USERS **13000**, USER HASH TABLE **13020**, GROUPS AND PERMISSIONS **13040**, FLAGGED **13060**, CLIENTS **13080**, CHARITY **13100**, GUEST LIST **13120**, COMPANY LICENSE INFORMATION **13140**, TRANSACTIONS **13160**, SHIPPING COMPANIES **13180**, SHIPMENTS **13200**, SHIPPING CODES **13220**, PAYMENT METHODS **13240**, SURVEY QUESTIONS **13260**, SURVEY FORMS **13280**, SURVEY RESPONSES **13300**, STATISTICS **13320**, EMAIL GROUP **13340**, EMAIL LIST **13360**, BULLETINS **13380**, FAN LIST **13400**, TROUBLE TICKET **13420**, AREA GROUP **13440**, AREA LIST **13460**, UNPUBLISHED RESOURCES **13480**, UNPUBLISHED RESOURCE GROUP **13500**, RESOURCES **13520**, RESOURCE GROUP **13540**, EARMARKED **13560**, ORGANIZATION CHART **13580**, COST CENTER **13600**, REQUESTS **13620**, INCENTIVE CODES **13680**, and NEIS WEB SERVICE **13700**.

Fig. 24 illustrates the NEIS database **14000**. The NEIS database includes an EVENT TABLE **14020**, an EVENT TYPE TABLE **14040**, a VENUE TABLE **14060**, a RESTAURANTS TABLE **14080**, a LOCAL ATTRACTIONS TABLE **14100**, a SCORES/HIGHLIGHTS TABLE **14120**, a DIRECTIONS TABLES **14140**, and parts of the NEIS database that can be requested **14160**. The EVENT TABLE **14020** includes EVENT ID (PK), EVENT NAME, EVENT DESCRIPTION, EVENT TYPE ID, EVENT START DATE, EVENT END DATE, EVENT START TIME, EVENT SALE START, ALTERNATE VENUE ID, EVENT LO TEMPERATURE, EVENT HI TEMPERATURE, EVENT WEATHER, and EVENT SPECIAL DAY. The EVENT TYPE TABLE **14040** includes the fields EVENT TYPE ID, EVENT TYPE PARENT ID, EVENT TYPE NAME, EVENT TYPE VENUE, and EVENT TYPE DESCRIPTION. The VENUE TABLE **14060** includes the fields VENUE ID (PK), VENUE ID, VENUE ADDRESS 1, VENUE ADDRESS 2, VENUE

CITY, VENUE STATE, VENUE ZIP, VENUE COUNTRY, VENUE TICKET PHONE, VENUE PHONE, VENUE IMAGE BIG FILE, VENUE IMAGE SMALL FILE, VENUE IMAGE BIG PATH, and VENUE IMAGE SMALL PATH. The RESTAURANTS TABLE **14080** includes the fields RESTAURANT ID (PK), RESTAURANT NAME, RESTAURANT ADDRESS 1, RESTAURANT ADDRESS 2, RESTAURANT CITY, RESTAURANT STATE, RESTAURANT ZIP, RESTAURANT COUNTRY, RESTAURANT PHONE, RESTAURANT RESERVATION TAKEN, RESTAURANT DESCRIPTION, RESTAURANT PICTURE, RESTAURANT DISTANCE FROM VENUE, and RESTAURANT DRESS CODE.

The LOCAL ATTRACTIONS TABLE **14100** includes the fields ATTRACTION ID (PK), ATTRACTION ADDRESS 1, ATTRACTION ADDRESS 2, ATTRACTION CITY, ATTRACTION STATE, ATTRACTION ZIP, ATTRACTION COUNTRY, ATTRACTION PRIMARY PHONE, ATTRACTION SECONDARY PHONE, ATTRACTION DESCRIPTION, ATTRACTION TYPE, and ATTRACTION DISTANCE FROM VENUE. The SCORES/HIGHLIGHTS TABLE **14120** includes the fields SCORE ID (PK), PERIOD NUMBER, HOME TEAM SCORE, VISITOR TEAM SCORE, SPORTS STATISTICS ID, CURRENT CLOCK TIME, and OVERALL HIGHLIGHTS. The DIRECTIONS TABLE **14140** includes the fields DIRECTION ID, VENUE ID, RESTAURANT ID, LOCAL ATTRACTION ID, FROM LOCAL TO LOCAL, and DIRECTION OVERVIEW. Parts of the system that can be requested **14160** include fields: EVENT (by name - date), CATEGORY, VENUE, SALE START, EVENT TYPE (by event ID, name); VENUE (by name - ID - parent Id of event type, zip code, city, state, area code); RESTAURANT (by name - ID - address - city - reservations - reservations - zip code - state - area code); LOCAL ATTRACTION (by name - ID - address - city -zip code - state - area code - type - distance from venue); and SCORES (by event name - ID - event type - name).

Fig. **25** illustrates an NEIS flowchart diagram and the interaction between the fields VENUE **15000**, RESTAURANTS **15020**,

DIRECTIONS **15040**, LOCAL ATTRACTIONS **15060**, EVENT TYPE **15080**, EVENTS **15100**, and SCORES **15120**. **Fig 26** shows a basic XML structure **16000** for the NEIS according to the invention. **Figs. 27A**, **27B**, and **27C** show a basic XML structure **17000** for the NEIS that may be used with ERM software **10** according to the present invention.

Several configurations of ERM software **10** according to the invention that vary in the amount of available functionality may be provided to the general public. For example, a first configuration of the ERM software **10** may provide the least functionality. Such a configuration may only provide the basic capability needed by a resource manager in a company. This configuration may store all of the company's resources in one place and only enable a user to enter inventory into the ERM system. It may only offer an option for any authorized management to enter the ERM software **10** and view the inventory in the system along with a scaled down version of the reporting software. The reporting functionality may be limited to tracking what is entered into the system or the quantity and stock of specific events and resources. The first configuration of the ERM software **10** may include a central database, full NEIS access, Internet Access, limited reporting and management information systems, educational materials, and basic customer support.

A second configuration of the ERM software **10** may include all functionality from the first configuration of the ERM software **10**. The second configuration of the ERM software **10**

enables a user to create a work group structure and define branches and divisions in the company/business. Allowing an administrator to utilize a work group business model offers the ability to define a company/business structure and use the organization to speak directly with these groups. The second configuration enables the administrator to email each group about resources but does not offer the ability to distribute or resell to anyone. The second configuration of the ERM software **10** may include a central database, full NEIS access, Internet Access, limited reporting and management information systems, preference tracking, user company/business workgroups, user database, email communications, educational materials, and customer support.

A third configuration of the ERM software **10** includes a larger variety of functionality. The third configuration includes some type of distribution built into the ERM software **10**. At this point, the company/business needs access to payment and shipping solutions over the Internet and may start to utilize a to-scale version of the reporting and management information systems features of the system. The third configuration of the ERM software **10** may also introduce the general user website enabling the user base to access software of its own. In the first and second configurations of the ERM software **10**, the inventory is communicated via administrative software or email. However, the distribution is limited only to resale within the company/business to allow the company/business to make money back from unused resources. These resources are

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also limited to the events that are offered from the NEIS system ingrained in the ERM software **10**.

Another unique feature that may be added to the third configuration of the ERM software **10** is the introduction of the action alert system. This special piece of software runs as a separate window that displays a real-time table of what actions need to be taken within the system listing them from the most critical to the least critical. Each item is linked directly to the action that needs to be taken. The third configuration of the ERM software **10** includes a central database, full NEIS access, Internet Access, reporting and management information systems, preference tracking, user company/business workgroups, user database, email communications, internal resale database, general user software, online payment solutions, online shipping solutions, administrative workgroups, action alert system, educational materials, and expanded customer support.

A fourth configuration of the ERM software **10** may include every feature in the third configuration with a dynamic expansion added to the system. The fourth configuration may include every feature that the ERM software **10** has to offer with the exception of reselling resources to external business on the business resale network. The fourth configuration includes the entire distribution, reporting, survey, internal resale, communications, workgroup, and administrative packages allowing the user to control every aspect of their internal resources. The fourth configuration includes the highest level of customer support and

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an SDK for companies/businesses that wish to push the ERM software **10** above and beyond its limit.

The company/business may enter special company/business specific events outside of the NEIS system and enter resources into the ERM software **10** under those categories. The fourth configuration of the ERM software **10** includes a central database, full NEIS access, Internet Access, reporting and management information systems, responsive survey/form database, preference tracking, user company/business workgroups, user database, full email/Internet communications, internal resale database, general user software, online payment solutions, online shipping solutions, administrative workgroups, action alert system, full distribution pipeline, SDK for software expansion, educational materials and classes, and premier customer support.

A fifth configuration of the ERM software **10** may vary slightly from the fourth configuration of the ERM software **10**. The fifth configuration includes every feature in the fourth configuration as well as a license to resell any resource in their inventory over the Internet on a central sight dedicated to business-to-business direct resale of internal company/business resources. This 'Business Resale Network' allows the company/business to offload or pickup any resources needed that other companies have to offer. The fifth configuration of the ERM software **10** includes a central database, full NEIS access, Internet Access, reporting and management information systems, responsive survey/form database, preference tracking, user

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company/business workgroups, user database, full email/Internet communications, internal resale database, general user software, online payment solutions, online shipping solutions, administrative workgroups, action alert system, full distribution pipeline, SDK for software expansion, business resale network license, educational materials and classes, and premier customer support.

While the invention has been described with references to its preferred embodiments, it will be understood by those skilled in the art that various changes may be made and equivalents may be substituted for elements thereof without departing from the true spirit and scope of the invention. In addition, many modifications may be made to adapt a particular situation or material to the teaching of the invention without departing from its essential teachings.